

## CLAIMS

What is claimed is:

1. A vehicle barrier, comprising:  
a barrier film having at least one layer including an interpolymer material;  
at least one rib operably extending from the barrier film, the rib operably positioned adjacent an outer perimeter of the film; and  
at least one drawn form positioned adjacent the at least one rib and extending opposite to the at least one rib;  
wherein the rib operably forms a seal with a first body member of a vehicle, the drawn form operably enhancing formation of the seal.
2. The barrier of Claim 1, wherein the barrier film comprises a first layer having the interpolymer material and a second layer.
3. The barrier of Claim 2, wherein the second layer comprises a polymeric material.
4. The barrier of Claim 3, wherein the polymeric material comprises a polyethylene material.

5. The barrier of Claim 1, wherein the drawn form is in operable contact with a second body member of the vehicle to maintain a substantially consistent sealing force along the seal formed by the male formed rib.

6. The barrier of Claim 1, wherein the rib comprises a male formed rib having a substantially uniform wall thickness throughout the rib.

7. The barrier of Claim 6, wherein the rib comprises:  
an engagement surface;  
a pair of opposed walls operably supporting the engagement surface;

wherein a width of the engagement surface is selectable to ensure each of the opposed walls deflects outwardly before the engagement surface deflects when the engagement surface operably contacts a vehicle sealing surface.

8. The barrier of Claim 1, wherein the rib further comprises:  
a first section elevated from the barrier film; and  
a second section elevated above the first elevated section.

9. A moisture, air and acoustic barrier, comprising:

a barrier film having a first layer and a polymeric second layer, the first layer including an interpolymer material;

at least one rib defining a raised seal, the rib operably positioned adjacent an outer perimeter of the film; and

at least one drawn form positioned adjacent the at least one rib operable to maintain a substantially consistent sealing force along the raised seal;

wherein the interpolymer material includes a density selectable to attenuate an acoustic energy through the film when the rib is in operable communication with a body member of a vehicle.

10. The barrier of Claim 9, comprising a film volume wherein the first layer defines approximately sixty five percent of the film volume.

11. The barrier of Claim 9, comprising a film volume wherein the first layer defines a percentage of the film volume ranging from approximately twenty percent to approximately ninety five percent.

12. The barrier of Claim 9, wherein the density of the interpolymer material is at least 2.0 g/cm<sup>3</sup>.

13. The barrier of Claim 9, wherein the interpolymer material comprises a filler having at least one of a calcium carbonate material and a barium sulfate material.

14. The barrier of Claim 9, comprising:  
a film thickness ranging from approximately 0.25 mm to approximately 1.52 mm; and  
a film weight basis ranging from approximately 0.15 to approximately 0.50 lb/sq-ft.

15. The barrier of Claim 9, comprising a nominal film thickness of approximately 0.76 mm.

16. The barrier of Claim 9, wherein the second layer comprises a polyethylene material.

17. The barrier of Claim 9, comprising an outward facing surface of the rib operably formed by the second layer.

18. A barrier positionable between a vehicle trim piece and a vehicle body member, the barrier comprising:

- a composite sheet having a plurality of apertures defining fastener attachment points operable to connect the barrier to the vehicle trim piece;
- a first sheet layer including an interpolymer material;
- a second sheet layer including a polyethylene material;
- a raised rib formed about at least a portion of a perimeter of the composite sheet, operable to form a seal between the composite sheet and the vehicle body member; and
- an engagement surface of the raised rib rigidly supported by an opposed pair of deflectable walls;

wherein the barrier operably attenuates an acoustic energy between the vehicle trim piece and the vehicle body member.

19. The barrier of Claim 18, comprising an adhesive bead applied to the raised rib operable to retain contact between the raised rib and the vehicle body member.

20. The barrier of Claim 18, wherein the interpolymer material comprises a thermoplastic elastomer substantially filled with from approximately 50 percent to approximately 95 percent of an inorganic filler.

21. The barrier of Claim 18, wherein the polyethylene material comprises one of a high density polyethylene, a medium density polyethylene, a low density polyethylene, and an ultra low density polyethylene.

22. The barrier of Claim 18, comprising at least one molded form positionable between the vehicle body member and the vehicle trim piece operable to substantially equalize a sealing force along a length of the raised perimeter rib.

23. A barrier positionable between a vehicle trim piece and a vehicle body member operable to attenuate an acoustic energy between the vehicle trim piece and the vehicle body member, the barrier comprising:

a composite sheet having a first sheet layer including an interpolymer material and a second sheet layer including a polymeric material; and

a sealing strip formed about at least a portion of a perimeter of the composite sheet, operable to form a seal between the composite sheet and the vehicle body member; and

at least one drawn form positioned adjacent a portion of the sealing strip operable to maintain a substantially consistent sealing force along the seal.

24. The barrier of Claim 23, wherein the polymeric material comprises a polyethylene material.

25. The barrier of claim 23, wherein the sealing strip comprises an adhesive bead.

26. The barrier of Claim 23, wherein the sealing strip comprises a gasket.

27. A method for forming an acoustic barrier, the barrier having an interpolymeric material and a polymeric material, the method comprising:

- creating a film using the interpolymeric material and the polymeric material having the interpolymeric material in a first layer and the polymeric material in a second layer of the film;
- forming a raised rib about at least a portion of a perimeter of the film;
- positioning a raised form adjacent at least a portion of the raised rib, the raised form oriented directionally opposite from the raised rib; and
- applying a sealing strip to the raised rib.

28. The method of Claim 27, further comprising simultaneously thermoforming the raised rib and the raised form.

29. The method of Claim 27, further comprising die cutting a finished perimeter shape of the acoustic barrier.

30. The method of Claim 27, further comprising adding a polymeric glass fiber material to the interpolymeric material.

31. The method of Claim 27, further comprising co-extruding the first layer and the second layer.



32. The method of Claim 27, further comprising:

separately forming the second layer; and

laminating the second layer to the first layer.

33. The method of Claim 27, further comprising:

extending the raised rib outwardly from the second layer of the film  
to operably form a first outward facing surface; and

extending the raised form outwardly from the first layer of the film to  
operably form a second outward facing surface; and

applying the sealing strip to the first outward facing surface.

34. A method for forming an acoustic barrier positionable between component parts of an automobile vehicle, the method comprising:

- co-extruding a film having an interpolymeric material layer and a polymeric layer;
- forming a raised rib that extends outwardly away from a first side of the film and about at least a portion of a perimeter of the film, the raised rib having an engagement surface supported by opposed walls;
- creating a raised form that extends outwardly away from a second side of the film and oppositely directed from the raised rib;
- applying a sealing strip along an outer face of the raised rib; and
- positioning the form adjacent the raised rib such that a compressive force applied to the form acts to approximately equalize a sealing force about the raised rib by operatively deflecting the opposed walls.

35. The method of Claim 34, further comprising forming a plurality of apertures between the raised rib and the perimeter.

36. The method of Claim 34, further comprising decreasing a density of the polymeric layer to increase a thickness of the film.

37. The method of Claim 34, further comprising positioning a release liner on the adhesive bead.

38. The method of Claim 37, further comprising:  
removing the release liner; and  
applying the compressive force.
39. The method of Claim 34, further comprising co-extruding the film.
40. The method of Claim 34, further comprising injection molding the  
film.
41. The method of Claim 34, further comprising forming the film of a  
foamed polymeric material using non-crosslinking concentrates.